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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/413,792	10/07/1999	PATRICK ROSS TRISCHITTA	04787.81749	2431

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EXAMINER	
SINGH, DALZID E	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/413,792	TRISCHITTA, PATRICK ROSS	
	Examiner	Art Unit	
	Dalzid Singh	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3-10,13-15 and 20-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-7,9,10,13-15 and 20-25* is/are rejected.

7)☒ Claim(s) *8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 24 and 25 are objected to because of the following informalities: claims 24 and 25 recite, "a third electrical power connector,...". In the claims there is no mention of a first and second electrical power connector. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 24 and 25, recite "first landmass having ... a first piece of power feed equipment having positive and negative terminals located on the third landmass;" It appears that the first piece of power feed equipment is located on the first landmass and not on a third landmass.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3-7, 9, 10, 13-15 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art disclosed by applicant as Figs. 2 and 4 (hereinafter "reference 1") in view of Kawano (US Patent No. 5,526,157).

Regarding claim 24 (as far as understood in view of the 112 2nd paragraph), reference 1 shows a system for providing communications between communication devices located on different landmasses, comprising:

a first landmass (A) having at least a first communication device and a first piece of power feed equipment (403) having positive and negative terminals located on the first landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a second landmass (C) separated from said first landmass by a first body of water, said second landmass having at least a second communication device and a

second piece of power feed equipment (406) having positive and negative terminals located on the second landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a third landmass (B) separated from said first and said second landmasses by at least a second body of water, said third landmass having at least a third communication device (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data);

a first cable (401) including at least one data signal carrying line carrying data signals between said communication devices of said first (A) and said third (B) landmasses and a first electrical power conductor connected to said positive terminal of said first piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals); and,

a second cable (402) including one or more data signal carrying lines carrying data signals between said communication devices of said second (C) and said third (B) landmasses and a second electrical power conductor connected to said negative

terminal of said second piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals).

Reference 1 discloses undersea communication system as discussed above and differs from the claimed invention in that reference 1 does not disclose an electrical power connector located on said third landmass permanently connecting said first and said second electrical power conductors such that power is supplied to said first and said second electrical power conductors exclusively by said first and said second pieces of power feed equipment. However, connecting two cables is well known. In col. 2, lines 17-38 and Fig. 11, Kawano teaches connecting opposite ends of submarine cables. In col. 6, lines 14-24, Kawano further teaches that submarine optical cable comprises of power supply line which supply power to different terminals. As in Fig. 11, Kawano shows directly supplying power from terminal station (21) to another terminal station (22) (see col. 6, lines 31-49). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide power from one terminal station to other terminal stations as taught by Kawano. One of ordinary skill in the art would have been motivated to do such in order to reduce or eliminate unnecessary sources.

Regarding claim 3, the combination of reference 1 and Kawano shows positive terminal of first power feed equipment and negative terminal of second power feed equipment coupled to the cables (see Fig. 4 of reference 1) and differs from the

claimed invention in that the combination does not show the negative terminal of said first piece of power feed equipment and said positive terminal of said second piece of power feed equipment are electrically connected to a ground potential. However, it well known to coupled the other terminal to ground potential in order to form common ground for both power feed equipments.

Regarding claim 4, as shown in Fig. 4, reference 1 shows the first (401) and second cables (402) carry optical signals, and each includes one or more optical repeaters (103), wherein said optical repeaters are powered exclusively by said first and second pieces of power feed equipment.

Regarding claim 5, as shown in Fig. 4, reference 1 shows end of said first cable (401) and an end of said second cable (402) enter onto a third landmass (B) at a common landing point (the common landing point is landmass (B)).

Regarding claim 6, the combination of reference 1 and Kawano shows first and second cable at landmass (B) and differ from the claimed invention in that the combination does not specifically disclose that ends of said first and second cables are routed to a cable station, and said electrical power connector is located in said cable station. However, since the cables disclosed by reference 1 and Kawano carry data and power, therefore it would have been obvious that the first and second cable are routed to a cable station. One of ordinary skill in the art would have been motivated to route the cables to a cable station in order to provide services to customers.

Regarding claim 7, the combination of reference 1 and Kawano shows plurality of data carrying lines (see Fig. 2 of reference 1) and differs from the claimed invention in that the combination does not specifically disclose that the data lines are communicatively coupled to a communication device of a first communication network located on the first landmass. However, since the cables disclosed by reference 1 and Kawano carry data, therefore it would have been obvious that the data lines are communicatively coupled to communication device. Furthermore, it would have been obvious that the communication networks are located on a landmass such as first landmass.

Regarding claim 9, as shown in Fig. 4, reference 1 shows that signal carrying lines of said first cable (401) are communicatively isolated from said signal carrying lines of said second cable (402) (since the signal carrying lines of the first and second cable are not connected, therefore, they are communicatively isolated).

Regarding claim 10, the combination of reference 1 and Kawano shows different landmasses (A, B, C) coupled by different signal carrying cables (401, 402) (see Fig. 4 of reference 1) and differs from the claimed invention in that the combination does not specifically disclose that the signal carrying lines of said first cable carry different signals from signals carried on said signal carrying lines of said second cable. However, since the cables are coupled to different landmasses comprising of customer, therefore it would have been obvious that the cables carry different signal in order to provide various services to the customer.

Regarding claim 25, (as far as understood in view of the 112 2nd paragraph), reference 1 shows a system for providing communications between communication devices located on different landmasses, comprising:

a first landmass (A) having at least a first communication device and a first piece of power feed equipment (403) having positive and negative terminals located on the first landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a second landmass (C) separated from said first landmass by a first body of water, said second landmass having at least a second communication device and a second piece of power feed equipment (406) having positive and negative terminals located on the second landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a third landmass (B) separated from said first and said second landmasses by at least a second body of water, said third landmass having at least a third communication device (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data);

a first cable (401) having a first data signal carrying line carrying data signals between communication devices of said first landmass (A) and said third (B) landmass, a first electrical power conductor connected to said positive terminal of said first piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals), and

a first repeater (103) electrically connected to said first electrical power conductor (see Fig. 4); and,

a second cable (402) having a second data signal carrying line carrying lines carrying data signals between communication devices of said second landmass (C) and said third landmass (B), a second electrical power conductor connected to said positive terminal of said first piece of power feed equipment, and a second repeater (103) electrically connected to said second electrical power conductor (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals).

Reference 1 discloses undersea communication system as discussed above and differs from the claimed invention in that reference 1 does not disclose an electrical power connector located on said third landmass permanently connecting said first and said second electrical power conductors such that power is supplied to said first and said second electrical power conductors exclusively by said first and said second pieces of power feed equipment. However, connecting two cables is well known. In col. 2, lines 17-38 and Fig. 11, Kawano teaches connecting opposite ends of submarine cables. In col. 6, lines 14-24, Kawano further teaches that submarine optical cable comprises of power supply line which supply power to different terminals. As in Fig. 11, Kawano shows directly supplying power from terminal station (21) to another terminal station (22) (see col. 6, lines 31-49). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide power from one terminal station to other terminal stations as taught by Kawano. One of ordinary skill in the art would have been motivated to do such in order to reduce or eliminate unnecessary sources. Furthermore, it would have been obvious that when the first and second cable are connected, then the first and said second repeaters are powered exclusively by said first and said second pieces of power feed equipment.

Regarding claim 13, in Fig. 2, reference 1 shows first and second repeaters are optical repeaters (103), and first and second data signal carrying lines are optical fibers (see page 3 of specification).

Regarding claim 14, in Fig. 4, reference 1 shows first and second that the data signal carrying lines includes a plurality of substantially continuous optical fibers.

Regarding claim 15, in Fig. 4, reference 1 shows that the first and second data signal carrying lines. Since cable stations may be coupled to the cable segments, therefore it would have been obvious to an artisan of ordinary skill in the art to provide connection of the cable station to the cable segment such that the cable segments are not connected in series. One of ordinary skill in the art would have been motivated to do this in order to maintain continuous operation of the cable stations in the event of faulty cable segment.

Regarding claims 20 and 22, as discussed above, the combination of reference 1 and Kawano discloses branching unit for connecting cables of different landmasses and differ from the claimed invention in that the combination does not specifically disclose that the electrical power connector (branching unit) comprises an insulated copper cable. However, it is well known that electrical signal traveling on copper generates electromagnetic filed. Such field causes interference with other electronic devices. Therefore, based on this it would have been obvious to provide insulator to the copper lines in order to reduce or eliminate electromagnetic interference.

Regarding claims 21 and 23, the combination of reference 1 and Kawano shows electrical power connector comprises a power conductor of a connector cable segment comprising one or more lines configured for carrying data signals.

6. Claims 3-7, 9, 10, 13-15 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art disclosed by applicant as Figs. 2 and 4 (hereinafter "reference 1") in view of Tomosugi (JP 57099042).

Regarding claim 24 (as far as understood in view of the 112 2nd paragraph), reference 1 shows a system for providing communications between communication devices located on different landmasses, comprising:

a first landmass (A) having at least a first communication device and a first piece of power feed equipment (403) having positive and negative terminals located on the first landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a second landmass (C) separated from said first landmass by a first body of water, said second landmass having at least a second communication device and a second piece of power feed equipment (406) having positive and negative terminals located on the second landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of

power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a third landmass (B) separated from said first and said second landmasses by at least a second body of water, said third landmass having at least a third communication device (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data);

a first cable (401) including at least one data signal carrying line carrying data signals between said communication devices of said first (A) and said third (B) landmasses and a first electrical power conductor connected to said positive terminal of said first piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals); and,

a second cable (402) including one or more data signal carrying lines carrying data signals between said communication devices of said second (C) and said third (B) landmasses and a second electrical power conductor connected to said negative terminal of said second piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals).

Reference 1 discloses undersea communication system as discussed above and differs from the claimed invention in that reference 1 does not disclose an electrical

power connector located on said first landmass and connecting said electrical power conductors of said first and second cables so that electrical current can flow between said first and second power feed equipment through said power conductors of said first and second cables, wherein no separate current source is coupled to said electrical power connector on said first landmass, and wherein said electrical power connector permanently connects said electrical power conductors of said first and second cables without providing a switch between said electrical power conductors of said first and second cables. However, connecting two cables without the use of a switch is well known. Shown in Fig. 2, Tomosugi shows separate cables (6) connected to power source (7) located at intermediate location. Such arrangement could be modified to provide a single connection connecting power source from one terminal (1) station to the other terminal (2) station without the use of power source located at intermediate location (see Fig. 1). Fig. 1 shows continuous cable connection between terminals (1) and (2). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide power from one terminal station to other terminal stations without a switch as taught by Tomosugi. One of ordinary skill in the art would have been motivated to do such in order to reduce or eliminate unnecessary sources.

Regarding claim 3, the combination of reference 1 and Kawano shows positive terminal of first power feed equipment and negative terminal of second power feed equipment coupled to the cables (see Fig. 4 of reference 1) and differs from the

claimed invention in that the combination does not show the negative terminal of said first piece of power feed equipment and said positive terminal of said second piece of power feed equipment are electrically connected to a ground potential. However, it well known to coupled the other terminal to ground potential in order to form common ground for both power feed equipments.

Regarding claim 4, as shown in Fig. 4, reference 1 shows the first (401) and second cables (402) carry optical signals, and each includes one or more optical repeaters (103), wherein said optical repeaters are powered exclusively by said first and second pieces of power feed equipment.

Regarding claim 5, as shown in Fig. 4, reference 1 shows end of said first cable (401) and an end of said second cable (402) enter onto a third landmass (B) at a common landing point (the common landing point is landmass (B)).

Regarding claim 6, the combination of reference 1 and Kawano shows first and second cable at landmass (B) and differ from the claimed invention in that the combination does not specifically disclose that ends of said first and second cables are routed to a cable station, and said electrical power connector is located in said cable station. However, since the cables disclosed by reference 1 and Kawano carry data and power, therefore it would have been obvious that the first and second cable are routed to a cable station. One of ordinary skill in the art would have been motivated to route the cables to a cable station in order to provide services to customers.

Regarding claim 7, the combination of reference 1 and Kawano shows plurality of data carrying lines (see Fig. 2 of reference 1) and differs from the claimed invention in that the combination does not specifically disclose that the data lines are communicatively coupled to a communication device of a first communication network located on the first landmass. However, since the cables disclosed by reference 1 and Kawano carry data, therefore it would have been obvious that the data lines are communicatively coupled to communication device. Furthermore, it would have been obvious that the communication networks are located on a landmass such as first landmass.

Regarding claim 9, as shown in Fig. 4, reference 1 shows that signal carrying lines of said first cable (401) are communicatively isolated from said signal carrying lines of said second cable (402) (since the signal carrying lines of the first and second cable are not connected, therefore, they are communicatively isolated).

Regarding claim 10, the combination of reference 1 and Kawano shows different landmasses (A, B, C) coupled by different signal carrying cables (401, 402) (see Fig. 4 of reference 1) and differs from the claimed invention in that the combination does not specifically disclose that the signal carrying lines of said first cable carry different signals from signals carried on said signal carrying lines of said second cable. However, since the cables are coupled to different landmasses comprising of customer, therefore it would have been obvious that the cables carry different signal in order to provide various services to the customer.

Regarding claim 25, (as far as understood in view of the 112 2nd paragraph), reference 1 shows a system for providing communications between communication devices located on different landmasses, comprising:

a first landmass (A) having at least a first communication device and a first piece of power feed equipment (403) having positive and negative terminals located on the first landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a second landmass (C) separated from said first landmass by a first body of water, said second landmass having at least a second communication device and a second piece of power feed equipment (406) having positive and negative terminals located on the second landmass (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data; furthermore, Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals; it is well known that the power feed equipment comprises positive and negative terminals);

a third landmass (B) separated from said first and said second landmasses by at least a second body of water, said third landmass having at least a third communication device (since the prior art show undersea communication network, therefore it would have been obvious that the communication system comprises of communication devices to communicates data);

a first cable (401) having a first data signal carrying line carrying data signals between communication devices of said first landmass (A) and said third (B) landmass, a first electrical power conductor connected to said positive terminal of said first piece of power feed equipment (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals), and

a first repeater (103) electrically connected to said first electrical power conductor (see Fig. 4); and,

a second cable (402) having a second data signal carrying line carrying lines carrying data signals between communication devices of said second landmass (C) and said third landmass (B), a second electrical power conductor connected to said positive terminal of said first piece of power feed equipment, and a second repeater (103) electrically connected to said second electrical power conductor (Fig. 2 of reference 1 shows cross-sectional section of the underwater cable which comprise of power conductor (203) and optical fibers (202) to carry data signals).

Reference 1 discloses undersea communication system as discussed above and differs from the claimed invention in that reference 1 does not disclose an electrical power connector located on said first landmass and connecting said electrical power conductors of said first and second cables so that electrical current can flow between said first and second power feed equipment through said power conductors of said first and second cables, wherein no separate current source is coupled to said electrical power connector on said first landmass, and wherein said electrical power connector permanently connects said electrical power conductors of said first and second cables without providing a switch between said electrical power conductors of said first and second cables. However, connecting two cables without the use of a switch is well known. Shown in Fig. 2, Tomosugi shows separate cables (6) connected to power source (7) located at intermediate location. Such arrangement could be modified to provide a single connection connecting power source from one terminal (1) station to the other terminal (2) station without the use of power source located at intermediate location (see Fig. 1). Fig. 1 shows continuous cable connection between terminals (1) and (2). Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide power from one terminal station to other terminal stations without a switch as taught by Tomosugi. One of ordinary skill in the art would have been motivated to do such in order to reduce or eliminate unnecessary sources.

Furthermore, it would have been obvious that when the first and second cable are connected, then the first and said second repeaters are powered exclusively by said first and said second pieces of power feed equipment.

Regarding claim 13, in Fig. 2, reference 1 shows first and second repeaters are optical repeaters (103), and first and second data signal carrying lines are optical fibers (see page 3 of specification).

Regarding claim 14, in Fig. 4, reference 1 shows first and second that the data signal carrying lines includes a plurality of substantially continuous optical fibers.

Regarding claim 15, in Fig. 4, reference 1 shows that the first and second data signal carrying lines. Since cable stations may be coupled to the cable segments, therefore it would have been obvious to an artisan of ordinary skill in the art to provide connection of the cable station to the cable segment such that the cable segments are not connected in series. One of ordinary skill in the art would have been motivated to do this in order to maintain continuous operation of the cable stations in the event of faulty cable segment.

Regarding claims 20 and 22, as discussed above, the combination discloses branching unit for connecting cables of different landmasses and differ from the claimed invention in that the combination does not specifically disclose that the electrical power connector comprises an insulated copper cable. However, it is well known that electrical signal traveling on copper generates electromagnetic filed. Such field causes interference with other electronic devices. Therefore, based on this it would have been

obvious to provide insulator to the copper lines in order to reduce or eliminate electromagnetic interference.

Regarding claims 21 and 23, the combination shows electrical power connector comprises a power conductor of a connector cable segment comprising one or more lines configured for carrying data signals.

Allowable Subject Matter

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

8. Applicant's arguments with respect to claims 1 and 11 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments filed 30 June 2006 have been fully considered but they are not persuasive.

Applicant indicated that the combination of Kawano and Tomosugi would include PFEs located on each of the three landmass. These are secondary references provided to teach connection of power feed equipments. The primary reference (reference 1) discloses landmasses (A,B,C) and power feed equipments associated with each. The

rejection is based on the combination of primary reference and secondary references. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, applicant indicates that Tomosugi is not analogous art and therefore the rejection is improper. In response to applicant's argument that Tomosugi is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, applicant's invention relates to bypassing of power feed equipment which is used in underwater communication system. The primary reference teaches underwater communication system. Tomosugi is a secondary reference provided to show the teaching of bypassing power feed equipment for submarine or underwater system, which is pertinent to the particular problem with which the applicant was concerned.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalzid Singh whose telephone number is (571) 272-3029. The examiner can normally be reached on Mon-Fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DS
September 18, 2006
David Singh